

National Grid Update New Hampshire Load Zone Loss Factor Decline March 2010

On March 9, 2009, Granite State Electric Company d/b/a National Grid ("National Grid" or "Company") submitted a report on the declining loss factor in the New Hampshire load zone. The New Hampshire PUC requested the report after Staff noticed that the losses that were to be applied to the NH Default Service loads were suspected to be too low. The report, and testimony by National Grid before the New Hampshire PUC on March 18, 2009, identified two reasons for the declining loss factor. They included: an incorrect use of the wholesale settlement model for the NH Load Zone and the somewhat unpredictable and varied NH Load Zone tie measure at Tewksbury during the 2008 calendar year timeframe. At that time, it was also noted that the measure at Tewksbury, while unpredictable in nature, was technically compliant with the ISO-NE OP-18 requirements.

The settlement process reconciles or adjusts all retail loads to the wholesale nodal load. Accordingly, zonal losses are reflective of the summation of all of the wholesale nodal load measures, including transmission thermal losses and retail loads including distribution thermal losses. The differences in these energy quantities are applied to the retail loads, including NH Default Service loads, and will vary depending upon the accuracy of any measurement that is included in the defined model inputs.

The modeling correction for the NH zonal tie point at Tewksbury was made on February 18, 2009 and the NH Load Zone was resettled back to January 1, 2009. From a wholesale perspective, one can see from Confidential - Figure 1 that the January 2009 original NH nodal load measure at the pool transmission facility ("PTF") point level as compared to the substation load was negative throughout the month. After the restoration of the "correct" modeling, this comparison changed to a more expected result as shown in Confidential - Figure 2. The difference in the NH nodal load measure at the PTF level as compared to the substation load was slightly positive and reflected a negative value only in a few days of the month.

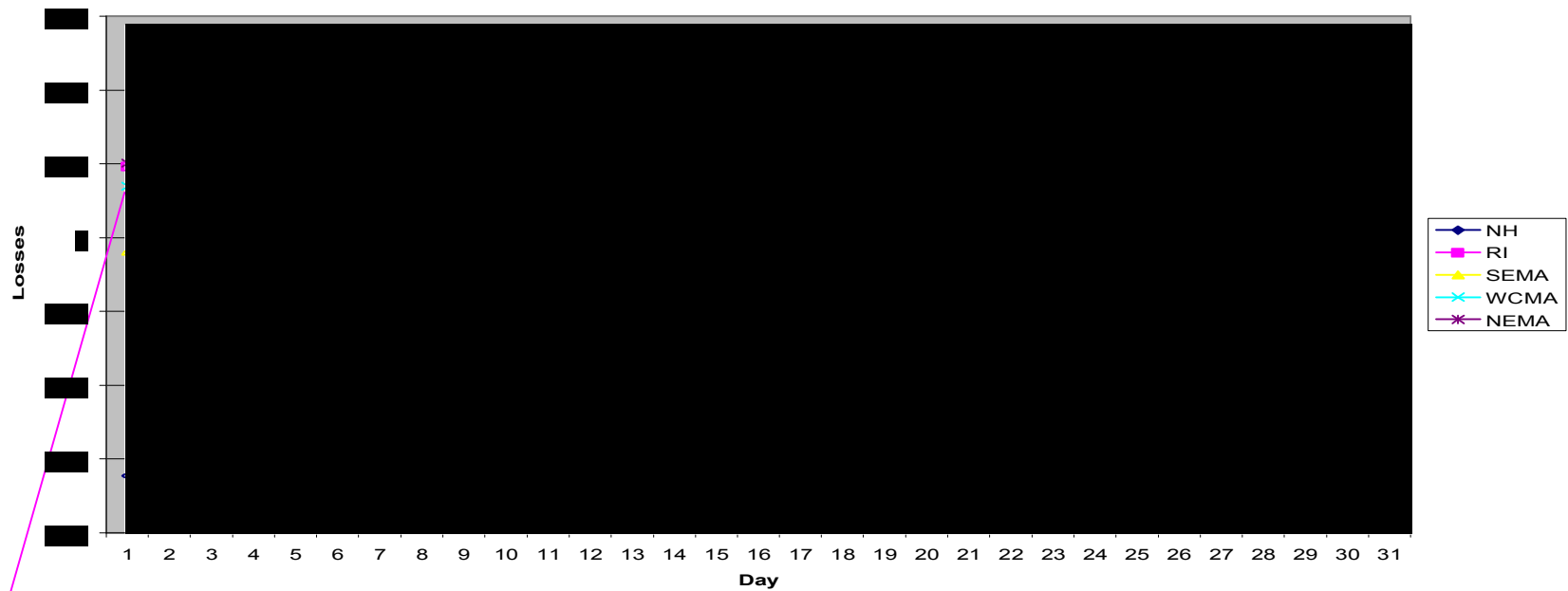
The Default Service graph included as Confidential - Figure 3 depicts the 2007-2009 time period. The chart illustrates the percent losses that were applied to the NH Large and Small Default Service loads. A Competitive Supplier Total is also listed. One can see from the graph that the 2008 percent loss levels were lower than expected and that, while the 2009 percent loss levels are more consistent with the NH Default Service percent losses experienced in 2007, the 2009 percent loss levels were somewhat higher than expected. Consequently, the Company now believes that the current actual loss data appears to reflect the inherent unpredictability of the meter measurement at Tewksbury, and is taking steps to address this issue.

The replacement of the metering at the Tewksbury NH Load Zone Tie will further correct the percent loss measure allocated to the NH Competitive Suppliers, NH Large and Small Default Service and the NH Load Zone wholesale settlement. The Tewksbury tie point upgrade is the highest priority of the 18 meter points to be upgraded in New England as part of a National Grid wide wholesale meter upgrade project. This work is expected to be completed in 2010. Field investigation and engineering work will need to be completed prior to construction.

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Confidential - Figure 1

NLD vs. DLD Losses
January 2009 - Original



Confidential - Figure 2

**NLD vs. DLD Losses
January 2009 - Revised**



Confidential - Figure 3

